

Application No. 10/039,578  
Page 2 of 9

IN THE CLAIMS

1. (Original) A piezoelectric lighter, comprising:

a casing having a liquefied gas cavity defined therein and a cap cavity;

a gas ejecting tip appearing from a ceiling of said casing and communicating with said liquefied gas cavity;

a windshield mounted on said ceiling of said casing and encircling said gas ejection tip;

a piezoelectric unit which is fitted in said casing having an igniting tip connected thereto;

a thumb-push cap, which is fitted in said cap cavity of said casing in a vertically movable manner, exposing a top portion thereof above said casing and being attached to a top end of said piezoelectric unit; and

a safety apparatus which comprises

a pressure absorbing device vertically held between said thumb-push cap and said ceiling of said casing, wherein said pressure absorbing device comprises a cylindrical rubber post and a soft elastic spring coaxially attached to said cylindrical rubber post for urging said thumb-push cap at an upper normal position thereof and providing a press resistance to said thumb-push cap;

a holding means integrally affixed to an interior surface of said thumb-push cap for rigidly holding one end of said pressure absorbing device in position; and

a receiving means provided in said cap cavity for receiving and supporting another end of said pressure absorbing device in position, wherein said press resistance is an additional upward force added to said thumb-push cap in addition to that provided by said piezoelectric unit.

2. (Original) A piezoelectric lighter, as recited in claim 1, wherein said holding means comprises a holding ring integrally protruded from an inner surface of a top wall of said thumb-push cap for firmly holding a top end of said cylindrical rubber post by inserting said top end of said cylindrical rubber post into said holding ring.

Application No. 10/039,578

Page 3 of 9

3. (Original) A piezoelectric lighter, as recited in claim 1, wherein said receiving means comprises a tubular shaped receiving guider which is integrally and upwardly extended from said ceiling of said casing within said cap cavity, wherein said receiving guider is longer than said soft elastic spring and has an inner diameter slightly larger than an outer diameter of a bottom end of said cylindrical rubber post, and that said cylindrical rubber post has a length larger than a distance between said holding means and said receiving guider, wherein said soft elastic spring is placed in said receiving guider and said lower end of said cylindrical rubber post is inserted into said receiving guider and pressed on said soft elastic spring so as to vertically hold said cylindrical rubber post in position, wherein said soft elastic spring provides an elastic force urging upwardly against said cylindrical rubber post and said thumb-push cap so as to retain said thumb-push cap in said upper normal position.

4. (Original) A piezoelectric lighter, as recited in claim 2, wherein said receiving means comprises a tubular shaped receiving guider which is integrally and upwardly extended from said ceiling of said casing within said cap cavity, wherein said receiving guider is longer than said soft elastic spring and has an inner diameter slightly larger than an outer diameter of a bottom end of said cylindrical rubber post, and that said cylindrical rubber post has a length larger than a distance between said holding means and said receiving guider, wherein said soft elastic spring is placed in said receiving guider and said lower end of said cylindrical rubber post is inserted into said receiving guider and pressed on said soft elastic spring so as to vertically hold said cylindrical rubber post in position, wherein said soft elastic spring provides an elastic force urging upwardly against said cylindrical rubber post and said thumb-push cap so as to retain said thumb-push cap in said upper normal position.

5. (Original) A piezoelectric lighter, as recited in claim 3, wherein said top end of said cylindrical rubber post is glued to said holding ring.

6. (Original) A piezoelectric lighter, as recited in claim 4, wherein said top end of cylindrical rubber post is glued to said holding ring.

7. (Currently amended) A piezoelectric lighter having a fuel tank, a gas ejecting tip communicating with said fuel tank, a piezoelectric

Application No. 10/039,578

Page 4 of 9

unit having an ignition tip connected thereto capable of producing a spark to ignite fuel released from said gas ejecting tip, and a thumb push cap capable of activating said piezoelectric unit when depressed, the improvement comprising:

said piezoelectric unit including a mechanism for providing an upward force for urging said thumb push cap into an upper normal position;

a spring providing additional upward force; and

a safety apparatus having a pressure absorbing device positioned to engage an underside of said thumb-push cap to impede movement of said cap in addition to said upward force provided by said piezoelectric unit and by said spring.

8. (Currently amended) A piezoelectric lighter having a fuel tank, a gas ejecting tip communicating with said fuel tank, a piezoelectric unit having an ignition tip connected thereto capable of producing a spark to ignite fuel released from said gas ejecting tip, and a thumb push cap capable of activating said piezoelectric unit when depressed, the improvement comprising:

said piezoelectric unit including a mechanism by which an upward force is transmitted to said thumb push cap to urge said cap into an upper normal position;

a spring providing additional upward force; and

a safety apparatus having a pressure absorbing device capable of transmitting an additional upward force to said thumb push cap to augment the upward force provided by said piezoelectric unit and by said spring.